

539, 369

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number
WO 2004/057592 A1

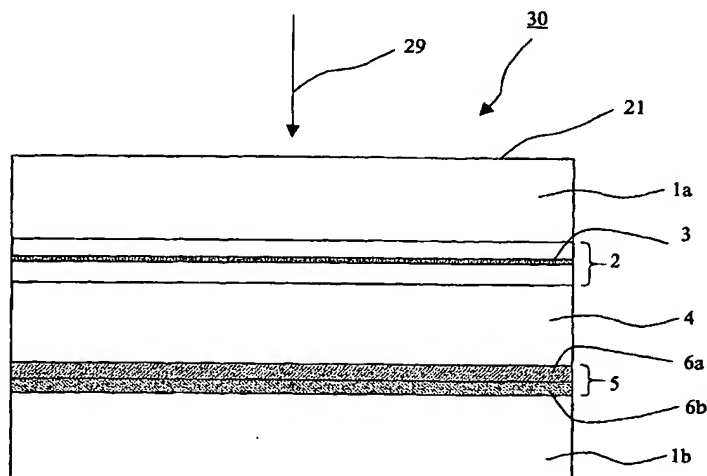
- (51) International Patent Classification⁷: **G11B 7/24**, 7/26, 7/0037, 7/0045, 7/006
- (21) International Application Number: PCT/IB2003/005322
- (22) International Filing Date: 19 November 2003 (19.11.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 02080424.1 19 December 2002 (19.12.2002) EP
- (71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 5621 BA Eindhoven (NL).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **VAN DEN OETELAAR, Ronald, J., A.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (74) Agent: **DEGUELLE, Wilhelmus, H., G.**; Philips Intellectual Property & Standards, Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,

[Continued on next page]

(54) Title: DUAL STACK OPTICAL DATA STORAGE MEDIUM AND USE OF SUCH MEDIUM



(57) **Abstract:** A dual stack optical data storage medium (30) for recording and reading by means of a focused radiation beam (29) is described. The beam enters the medium (30) through a first radiation beam entrance face (21). The medium has at least a first substrate (1a) with on at least one side of the first substrate (1a) a first layer stack (2), comprising a first information layer (3), a second layer stack (5), comprising a second information layer. The second layer stack (5) is present at a position more remote from the first radiation beam entrance face (21) than the first layer stack (2). A first transparent spacer layer (4) is present between the first layer stack (2) and the second layer stack (5). The first information layer (3) is a read only type layer or an organic write once type layer, and the second layer stack (5) consists of maximally three adjacent layers of an inorganic metallic material. In this way an optical data storage medium (30) is achieved which is compatible with a dual stack ROM version of said medium and which has a simple second layer stack (5).

WO 2004/057592 A1